

In the embodiment described with respect to Figs. 26-28, for example, it may be seen that a waste liquid supplying apparatus can supply the waste liquid intermittently. Noting Fig. 27, the solid line demonstrates the intermittent supply. A continuous supply is illustrated by the dashed line. As can be seen from comparing the solid and dashed lines of Fig. 28, when an equal amount of waste liquid 111 is processed, the concentration of the ink pigment that is contained in regenerated cleaning liquid 162 can be suppressed to a lower point using the intermittent supplying method than when using the continuous supplying method.

As such, by using an intermittent supplying method, a high processing capacity can be obtained as a whole when compared with a continuous supplying method. The regeneration processing time can be reduced while maintaining the purity of the cleaning liquid 162.

When waste liquid 111 contains water 109 as a major component, it is possible to use a continuous supplying method while still maintaining the purity of the cleaning liquid 162. Thus in this instance it may not be necessary to use the intermittent supplying mode, as it is possible to use the continuous supplying mode and raise the supply speed and reduce the regeneration processing time.

Dependent claim 33 further limits claim 31, and requires that the waste liquid supply apparatus also have the continuous supplying mode in which the waste liquid is supplied continuously to the first chamber. Further, the waste liquid supplying apparatus is operable to be switched between the intermittent supplying mode and the continuous supplying mode. Note for example change over switch 236 in the example of Fig. 26.

None of these advantages and aspects of claims 31 and 33 are disclosed or suggested by the references that have been cited by the Examiner. For the intermittent supplying mode, the Examiner cites JP 2001-315312 (Tejima). In looking at the machine translation and noting paragraphs 18 and 23 therein, as noted by the Examiner, it can be seen that in Tejima it is discussed that the waste fluid regeneration apparatus always reproduces pure penetrant remover in the storage tank even if there are sharp changes to the time interval of washing.

Based upon the fact that there are time intervals between washing of a blanket drum of a printing machine, the Examiner concludes that there is a waste liquid supplying apparatus. However, there is no disclosure of a waste liquid supplying apparatus in Tejima. It is the

Examiner's assumption that there is such an apparatus present. Further, even if such a waste liquid supplying apparatus were present, Tejima still has no disclosure of an intermittent supplying mode.

As discussed during the interview, simply because the washing takes place intermittently, this does not mean that the waste liquid is supplied intermittently. These are two different steps in the procedure. There is no indication of any relationship between the timing of washing and the supply of the waste liquid to a first chamber of the waste liquid regeneration apparatus.

It is respectfully submitted that it is improper for the Examiner to conclude that such is inherent when there is a complete lack of any such discussion. Tejima does not disclose any waste liquid supplying apparatus whatsoever, much less one having an intermittent supplying mode. The supply of water liquid could as well be a continuous supply to the waste liquid regeneration apparatus; but the reference is silent on this point, and it is improper for the Examiner to take the position that it supports intermittent supplying when there is in fact no evidence to that effect.

Further, the waste liquid supplying apparatus has the intermittent supply as a mode of operation thereof. This is a structural limitation upon the apparatus. Structure may be claimed by reciting the function of the structure, and weight must be given to such limitations. The limitations of claim 31 and claim 33 are not statements of intended use, but are statements of structural requirements of the apparatus by reference to its function.

The Examiner referred to the claims as being somewhat vague because they employed functional statements. However, reference to function is a proper way to claim structure. The limitations cannot be dismissed or ignored simply because they are inconvenient. The Examiner is still required to find structure capable of carrying out the function. Tejima has no indication in it that it has the capability of intermittent supply.

From the above discussion it is clear that even if Tejima were interpreted as having some form of waste liquid supplying apparatus as a necessary consequence of the waste liquid somehow arriving at the first chamber of the waste liquid regeneration apparatus, there is nothing to indicate that Tejima requires an intermittent supply mode. As noted, Tejima could contemplate a continuous supply mode. It is even further clear, when referring to claim 33, that

Tejima does not support apparatus that has both an intermittent and a continuous supply mode. No such apparatus having such functionality is disclosed in Tejima.

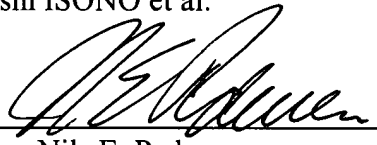
This is even further emphasized by claim 33 reciting that the waste liquid supplying apparatus is operable to switch between the intermittent supplying mode and the continuous supplying mode. As Tejima has no modes whatsoever disclosed, because it discloses no such apparatus, this can further not be accomplished by any structure of Tejima.

The Examiner's further suggestions regarding potential claim limitations are appreciated. However, any such further limitations should not be necessary at this point in the prosecution given that Tejima clearly fails to supply the structure for which the Examiner cites Tejima. As such, indication of the allowability of all of the claims that are pending in the application is requested.

In view of the above remarks, it is submitted that the present application is now in condition for allowance, and the Examiner is requested to pass the case to issue. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact Applicants' undersigned representative.

Respectfully submitted,

Hitoshi ISONO et al.

By: 

Nils E. Pedersen
Registration No. 33,145
Attorney for Applicants

NEP/krq
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
March 28, 2008